

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

Claim 1. (Previously presented) A method of manufacturing a semiconductor device, comprising the steps of:

forming first and second semiconductor islands on an insulating surface;
introducing ions of a p-type impurity into at least a portion of only said first semiconductor island without mass separation wherein said portion is to become a channel region of a thin film transistor; and

subjecting said first and second semiconductor islands to a thermal oxidization process to form a thermal oxide film on the first and second semiconductor islands wherein said p-type impurity is incorporated into the thermal oxide film formed on said first semiconductor island;

wherein a concentration of said p-type impurity monotonically decreases from a first portion distant from an upper surface of the first semiconductor island to a second portion close to the upper surface in a depthwise direction of the first semiconductor island.

Claim 2. (Previously presented) A method of manufacturing a semiconductor device as claimed in claim 1,

wherein said first semiconductor island constitutes a p-channel semiconductor device;
wherein said second semiconductor island constitutes an n-channel semiconductor device; and

wherein said p-channel semiconductor device and said n-channel semiconductor device are complementarily combined with each other to form a CMOS structure.

Claims 3-5. (Canceled)

Claim 6. (Previously presented) A method of manufacturing a semiconductor device as claimed in claim 1, wherein a thickness of said first semiconductor island is 100 to 1000Å.

Claim 7. (Previously presented) A method of manufacturing a semiconductor device as claimed in claim 2, wherein a thickness of said first semiconductor island is 100 to 1000Å.

Claims 8-10. (Canceled)

Claim 11. (Withdrawn) A method of manufacturing a semiconductor device comprising the steps of:

preparing a semiconductor island comprising crystalline silicon on an insulating surface;
introducing ions of an impurity comprising boron into at least a portion of said semiconductor island without mass separation, wherein said portion is to become a channel region of a thin film transistor; and then

oxidizing a surface of said semiconductor island to form an oxide film so that a part of boron introduced into said semiconductor island is incorporated into said oxide film.

Claim 12. (Original) The method according to claim 1 wherein said semiconductor device is a liquid crystal display device.

Claim 13. (Original) The method according to claim 1 wherein said semiconductor device is an electroluminescent display device.

Claim 14. (Original) The method according to claim 1 wherein said semiconductor device is a video camera.

Claim 15. (Original) The method according to claim 1 wherein said semiconductor device is a personal computer.

Claim 16. (Original) The method according to claim 1 wherein said semiconductor is a projection system.

Claims 17-26. (Canceled)

Claim 27. (Withdrawn) The method according to claim 11 wherein said semiconductor device is a liquid crystal display device.

Claim 28. (Withdrawn) The method according to claim 11 wherein said semiconductor device is an electroluminescent display device.

Claim 29. (Withdrawn) The method according to claim 11 wherein said semiconductor device is a video camera.

Claim 30. (Withdrawn) The method according to claim 11 wherein said semiconductor device is a personal computer.

Claim 31. (Withdrawn) The method according to claim 11 wherein said semiconductor device is a projection system.

Claim 32. (Withdrawn) The method according to claim 11 wherein said semiconductor device is an electroluminescent display device.

Claim 33. (Withdrawn) The method according to claim 11 wherein said semiconductor device is a video camera.

Claim 34. (Withdrawn) The method according to claim 11 wherein said semiconductor device is a personal computer.

Claim 35. (Withdrawn) The method according to claim 11 wherein said semiconductor device is a projection system.

Claim 36. (Withdrawn) The method according to claim 11 wherein said semiconductor device is a liquid crystal display device.

Claim 37. (Withdrawn) The method according to claim 11 further comprising a step of forming a gate electrode over said semiconductor island with said thermal oxide film interposed therebetween as a gate insulating film wherein said gate insulating film contains boron at a concentration of 1×10^{17} to $1 \times 10^{20}/\text{cm}^3$.

Claim 38. (Previously presented) The method according to claim 1 further comprising a step of forming a gate electrode over said first semiconductor island with said thermal oxide film interposed therebetween as a gate insulating film wherein said gate insulating film contains boron at a concentration of 1×10^{17} to $1 \times 10^{20}/\text{cm}^3$.

Claims 39-45. (Canceled)

Claim 46. (Previously presented) The method according to claim 1 wherein said p-type impurity is boron.

Claims 47-54. (Canceled)

Claim 55. (Withdrawn) A method of manufacturing a semiconductor device, comprising the steps of:

forming first and second semiconductor islands on an insulating surface;
introducing ions of a p-type impurity into at least a portion of only said first semiconductor island by plasma doping without mass separation wherein said portion is to become a channel region of a thin film transistor; and
subjecting said first and second semiconductor islands to a thermal oxidization process to form a thermal oxide film on the first and second semiconductor islands wherein said p-type impurity is incorporated into the thermal oxide film formed on said first semiconductor island;
wherein a concentration of said p-type impurity monotonically decreases from a first portion distant from an upper surface of the first semiconductor island to a second portion close to the upper surface in a depthwise direction of the first semiconductor island.

Claim 56. (Withdrawn) A method of manufacturing a semiconductor device as claimed in claim 55,

wherein said first semiconductor island constitutes a p-channel semiconductor device;
wherein said second semiconductor island constitutes an n-channel semiconductor device; and

wherein said p-channel semiconductor device and said n-channel semiconductor device are complementarily combined with each other to form a CMOS structure.

Claim 57. (Withdrawn) A method of manufacturing a semiconductor device as claimed in claim 55, wherein a thickness of said first semiconductor island is 100 to 1000Å.

Claim 58. (Withdrawn) The method according to claim 55 wherein said semiconductor device is an electroluminescent display device.

Claim 59. (Withdrawn) The method according to claim 55 wherein said semiconductor device is a video camera.

Claim 60. (Withdrawn) The method according to claim 55 wherein said semiconductor device is a personal computer.

Claim 61. (Withdrawn) The method according to claim 55 wherein said semiconductor device is a projection system.

Claim 62. (Withdrawn) The method according to claim 55 wherein said semiconductor device is a liquid crystal display device.

Claim 63. (Withdrawn) The method according to claim 55 further comprising a step of forming a gate electrode over said semiconductor island with said thermal oxide film interposed therebetween as a gate insulating film wherein said gate insulating film contains boron at a concentration of 1×10^{17} to $1 \times 10^{20}/\text{cm}^3$.

Claims 64-68. (Canceled)